

09/695,457
Notice of Allowability

Application No.

09/695,457

Examiner

Lun-See Lao

Applicant(s)

KHAN ET AL.

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04-05-207.
2. ☒ The allowed claim(s) is/are 62 and 65-83.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

1. This action responds to the amendment filed on 04-05-2007. Claims 1-61 and 63-64 have been canceled and claims 65-83 have been added. Claims 62 and 65-83 are pending.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Mr. Jonathan Berschadsky on May 22, 2007 to clarify the claim as to matters of form.

4. The application has been amended as follows:

Please replace claims 62, 66, 68, 72, 74-76, 78-80 and 82 as following:

Claim 62 (currently amended) An apparatus for fingerprinting an audio waveform, comprising:

a memory that operable to stores a codebook ~~which represents a~~
comprising one or more multivariate vectors, each multivariate vector comprising ~~[[of]]~~
one or more spectral features and represents ~~[[with]]~~ a corresponding one of a plurality
of codes; and

a processor ~~operable~~ configured to divide the audio waveform into a plurality of bins, compute one or more spectral features for each bin, and generate a fingerprint representing the audio waveform with a string of codes from the codebook based on the computed one or more spectral features for each bin.

Claim 66 (currently amended) The apparatus of claim 62 wherein the processor is ~~further operable to compresses~~ the string of codes to form a compressed string of codes.

Claim 68 (currently amended) The apparatus of claim 62, wherein the processor ~~is further operable to compresses~~ the string of codes such that temporal alignment between the string of codes and the audio waveform is maintained.

Claim 72 (currently amended) The apparatus of claim 62, wherein the processor ~~is further operable to computes~~ the one or more spectral features for a first group of data points within each bin, shifts one or more data points within each bin, and computes the one or more spectral features for a second group of data points within each bin.

Claim 74 (Presently Amended) The apparatus of claim 62, wherein the processor ~~is further to operable to generates~~ the fingerprint at a given time within the audio waveform.

Claim 75 (currently amended) The apparatus of claim 62, wherein the processor ~~is further operable to query~~ queries a database of audio files using the fingerprint.

Claim 76 (currently amended) The apparatus of claim 62, wherein the processor ~~is further operable to query~~ queries a database of pre-computed audio signatures.

Claim 78 (currently amended) The apparatus of claim 72, wherein the processor is ~~further operable to receive~~s at least one attribute associated with the fingerprint.

Claim 79 (currently amended) The apparatus of claim 72, wherein the processor is ~~further operable to receive~~s at least one attribute, wherein the at least one attribute is tagged to an audio file.

Claim 80 (currently amended) The apparatus of claim 72, wherein the processor is ~~further operable to receive~~s a customized playlist based on the fingerprint.

Claim 82 (currently amended) The apparatus of claim 72, wherein the processor is ~~further operable to receive~~s at least one feature value based on the fingerprint.

Allowable Subject Matter

5. Claims 62 and 65-83 are allowed.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any response to this action should be mailed to:

Mail Stop ____ (explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

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Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao,Lun-See whose telephone number is (571) 272-7501. The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao,Lun-See L.S.
Patent Examiner
US Patent and Trademark Office
Knox
571-272-7501
Date 05-22-2007


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600